

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for generating retinal images using the stigmatism of two foci of a substantially elliptical diopter comprising a semi-reflecting surface, ~~consisting of performing~~ said method comprising:

- positioning in the vicinity of the first focus of said elliptical substantially diopter:
  - a so-called "source" focus formed by the diaphragm of a pin diaphragm forming a convergence point of an image generated by a luminous display or a light source,
- positioning in the vicinity of the second focus of said substantially elliptical diopter, a so-called "image" focus formed by the pupil or the centre of the eye of the observer, and
- projecting in the vicinity of the retina of the eye of the observer, the image generated by said luminous display or by said light source and reflected by the

semi-reflecting surface of said substantially elliptical diopter.

2. (Previously presented) The method according to claim 1, wherein the said image generated by the luminous display is compressed according to a reciprocal mathematical function relatively to the distortion caused by the aforesaid substantially elliptical diopter.

3. (Previously presented) The method according to claim 1, wherein the said image generated by the luminous display is slightly tilted in order to reduce the distortion caused by the aforesaid substantially elliptical diopter.

4. (Currently amended) The method according to claim 1, ~~consisting of~~ wherein said method is carried out with an optical system generating an inverted distortion so as to compensate the distortion caused by the aforesaid substantially elliptical diopter.

5. (Currently amended) The method according to claim 1, ~~consisting of~~ wherein said method is carried out with a scanning system and a converging lens with a variable focal lens associated with the light source.

6. (Currently amended) The method according to claim 1, ~~consisting of~~ wherein said method is carried out with two identical substantially elliptical diopters separated by a converging lens with a transverse magnification equal to -1.

7. (Currently amended) The method according to claim 1, ~~consisting of~~ wherein said method is carried out with two different substantially elliptical diopters separated by a converging lens with a transverse magnification different from -1.

Claims 8-10 (Cancelled)

11. (Currently amended) A method for generating retinal images using the stigmatism of two foci of a substantially elliptical diopter comprising a semi-reflecting surface, ~~consisting of performing~~ said method comprising:

- positioning in the vicinity of the first focus of said substantially elliptical ~~substantially~~ diopter:
  - o a luminous display, each object point of which generates a beam first of all convergent before reflection on the semi-reflecting surface of said substantially elliptical diopter, and then

parallel in the vicinity of the pupil of the  
eye,

- positioning in the vicinity of the second focus of said substantially elliptical diopter, a so-called "image" focus formed by the pupil or the centre of the eye of the observer, and
- projecting in the vicinity of the retina of the eye of the observer, the image generated by said luminous display ~~or by said light source~~ and reflected by the semi-reflecting surface of said substantially elliptical diopter.

12. (Currently amended) The method according to claim 11, ~~consisting of~~ wherein said method is carried out with an optical system generating an inverted distortion so as to compensate the distortion caused by the aforesaid substantially elliptical diopter.

13. (Currently amended) The method according to claim 11, ~~comprising~~ wherein said method is carried out with two identical substantial elliptical diopeters separated by a converging lens with a transverse magnification equal to -1.

14. (Currently amended) The method according to

claim 11, ~~comprising~~ wherein said method is carried out with  
two different substantially elliptical diopters separated by a  
converging lens with a transverse magnification different from  
-1.

15. (Previously presented) A device for generating  
retinal images, using the stigmatism of two foci of a  
substantially elliptical diopter comprising a semi-reflecting  
surface, comprising:

- a so-called "source" focus formed by:
  - the diaphragm of a pin diaphragm forming a  
convergence point of an image generated by a  
luminous display, or a light source,
- a so-called "image" focus formed by the pupil or the  
centre of the eye of the observer, positioned in the  
vicinity of the second focus of said substantially  
elliptical diopter,
- a projection in the vicinity of the retina of the eye  
of the observer, of the image generated by said  
luminous display of by said light source, and  
reflected by the semi-reflecting surface of said  
substantially elliptical diopter.

16. (Previously presented) The device according to

claim 15, comprising optical correction means adapted to the ocular system of the user.

17. (Previously presented) The device according to claim 16, wherein the said optical correction means adapted to the ocular system of the user are adjustable.

18. (Currently amended) A device for generating retinal images, using the stigmatism of two foci of a substantially elliptical diopter comprising a semi-reflecting surface, comprising:

- a so-called "source" focus formed by:
  - a luminous display, each object point of which generates a beam first of all convergent before reflection on the semi-reflecting surface of said substantially elliptical diopter, and then parallel ~~to~~in the vicinity of the pupil of the eye,

positioned in the vicinity of the first focus of said substantially elliptical diopter,

- a so-called "image" focus formed by the pupil or the centre of the eye of the observer, positioned in the vicinity of the second focus of said substantially elliptical diopter,

- a projection in the vicinity of the retina of the eye of the observer, of the image generated by said luminous display ~~of by said light source~~, and reflected by the semi-reflecting surface of said substantially elliptical diopter.

19. (Previously presented) The device according to claim 18, comprising optical correction means adapted to the ocular system of the user.

20. (Previously presented) The device according to claim 19, wherein the said optical correction means adapted to the ocular system of the user are adjustable.